Page 9

REMARKS

The Office Action mailed November 12, 2008 tentatively rejected the presently pending claims. This is a full and timely response to that outstanding Office Action.

Upon entry of this response, claims 1, 4-6, 8, 12-13, 15-16, 18-19, and 21 remain pending in the present application.

I. Present Status of Patent Application

To the extent that these rejections have not been rendered moot by the cancellation of claims, they are respectfully traversed.

II. Rejections Under 35 U.S.C. §102(e)

A. <u>Claims 1, 4-6, 12, 13, 15, 16, 18, and 19-21</u>

The Office Action rejects claims 1, 4-6, 12, 13, 15, 16, 18, 19 and 21 under 35 U.S.C. §102(e) as allegedly being anticipated by (U.S. Patent No. 7, 133,441 to Barlev, et al. (hereinafter "Barlev"). For at least the reasons set forth below, Applicant respectfully traverses the rejection to the extent not rendered moot by amendment.

Independent Claim 1 recites:

1. A method for dynamic bin allocation, the method comprising: obtaining link performance data based on a plurality of test transmissions between two network elements, wherein the plurality of test transmissions comprises an upstream transmission, a downstream transmission, and a full-duplex transmission, the plurality of test transmissions performed in every channel of a discrete multi-tone (DMT) communications system and each performed at a maximum transmission power;

determining a desired transmission scheme for the discrete multitone communications system, wherein **each channel of the discrete multi-tone communications system is designated a transmission**

Page 10

mode based on the link performance data, wherein the link performance data comprises at least one of a data rate, an error rate, a signal-to-interference ratio, and a signal-to-noise ratio and the transmission mode is selected from an upstream mode, a downstream mode, and a full-duplex mode; and

assigning the desired transmission scheme to a connection between the two network elements in the discrete multi-tone communications system.

(Emphasis added).

Applicant respectfully submits that claim independent claim1 is patentably distinct from the cited art for at least the reason that the cited art does not disclose the features emphasized above. For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features of the claim at issue. *See, e.g., E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 7 U.S.P.Q.2d 1129 (Fed. Cir. 1988). Applicants respectfully submit that the cited art fails to meet this standard.

More specifically, the Office Action alleges in item 3 that *Barlev* discloses a plurality of test transmissions that comprises an upstream transmission, a downstream transmission, and a full-duplex transmission. To support this allegation, the Office Action cites the below quoted portions of *Barlev* in item 3:

The **test module** is also adapted to provide the appropriate line terminations if required by any of the measurements. *Barlev*, col. 18, lines 26-28. *Emphasis added.*

The process of loop qualification examines the loop configuration of the customer since a line with less attenuation is less affected by a given amount of crosstalk. The process also examines the type of equipment proposed to be installed and the existing systems already transmitting in the cable on the other pairs. This process is needed since different DSL schemes transmit downstream and upstream data differently. Some schemes segregate the frequencies used to transmit from the access

Page 11

service provider to the customer (i.e., downstream) from those used to transmit from the customer to the access device provider (i.e., upstream). Barley, col. 4, lines 58-63

Alternatively, the same technique may be used for transmission of ADSL signals directionally over the same copper pair utilizing the more isolated pairs in the binder and utilizing well known full duplex echo cancellation techniques. Barlev, col. 26, lines 9-13.

Applicants submit that the Office Action fails to disclose a plurality of test transmissions that comprises an upstream transmission, a downstream transmission, and a full-duplex transmission. A closer examination of the Barlev test module reveals that it has very little applicability to a system such as in the claimed invention. Barley explicitly states the following regarding the test module:

The test module 210 is adapted to perform parameter measurements of the twisted pairs 208. The measurements include mapping the spatial structure of the cable (as shown in FIG. 4), including binders within the cable, using crosstalk measurements. The crosstalk measurements include measurements at low frequencies where crosstalk is more monotonously proportional to the distance between pairs, measurements of crosstalk between different pairs and of NEXT transmission functions over one or more frequencies of interest, measurements of attenuation, level of interference between different pairs, SNR and cable length.

Barley, col. 18, lines 5-15. The above cited portion of the reference clearly states that the measurements taken by the test module of the Barlev reference does not include an upstream transmission, a downstream transmission, and a full-duplex transmission. Rather, the Barlev test module performs parameter measurements that include mapping the spatial structure of the cable as well as binders within the cable using crosstalk measurements. The claimed invention performs neither. Accordingly, Applicants submit that *Barlev* actually *teaches away* from the claimed invention.

Additionally, the Office Action fails to cite any portion of the reference that discloses designating a transmission mode for each channel of the discrete multi-tone

Art Unit: 2419

Page 12

transmission scheme based on link performance data. The Office Action attempts to cite an element of the claims of Barlev (col. 47, lines 14-19), which states:

a plurality of modem elements coupled to said plurality of twisted copper pair lines, each modem element associated with one of said copper pair lines and configured to operate at a data rate, delay, signal to noise ratio, and bit error rate, and bit error rate independent of other modern elements.

Applicants respectfully submit that the above cited portion of the reference fails to include any mention of designating a transmission mode for each channel of a DMT scheme, much less based on link performance data. It merely states that a plurality of modem elements possess various properties such as a data rate, delay, signal to noise ratio, and bit error rate.

In addition, the Office Action cites col. 26, lines 21-24 to allege that the reference discloses performing such test transmissions at maximum power. In contrast, the reference instead discloses how to maximize power without violating PSD regulations limiting maximum power radiated from a binder. The cited portion of the reference does not have relevance to performing test transmissions.

Accordingly, Applicants respectfully submit that independent claim 1 is allowable for at least the reason that Barlev does not disclose, teach, or suggest at least the above emphasized claim elements. Therefore, Barlev does not anticipate independent claim 1, and the rejection should be withdrawn for at least that reason.

For at least the reason that independent claim 1 is allowable over the cited references of record, dependent claims 4-6, 8 and 12 (which depend from independent claim 1) are allowable as a matter of law for at least the reason that dependent claims 4-6, 8 and 12 contain all the features of independent claim 1. See Minnesota Mining

Art Unit: 2419

Page 13

and Manufacturing Co. v. Chemque, Inc., 303 F.3d 1294, 1299 (Fed. Cir. 2002) Jeneric/Pentron, Inc. v. Dillon Co., 205 F.3d 1377, 54 U.S.P.Q.2d 1086 (Fed. Cir. 2000); Wahpeton Canvas Co. v. Frontier Inc., 870 F.2d 1546, 10 U.S.P.Q.2d 1201 (Fed. Cir. 1989). Therefore, since dependent claims 4-6, 8 and 12 are patentable over *Barlev*, the rejection of claims dependent claims4-6, 8 and 12 should be withdrawn and the claims allowed.

Independent claim 13 recites (with emphasis added)

13. A system for dynamic bin allocation, the system comprising a first network element and a second network element, wherein each of the first network element and the second network element comprises at least a processor module and a transceiver module that are coordinated to

obtain link performance data based on a plurality of test transmissions between the first network element and the second network element, wherein the plurality of test transmissions comprises an upstream transmission, a downstream transmission, and a fullduplex transmission, the plurality of test transmissions performed in every channel of a discrete multi-tone (DMT) communications system and each performed at a maximum transmission power;

determine a desired transmission scheme for the discrete multitone communications system, wherein each channel of the discrete multi-tone communications system is designated a transmission mode based on the link performance data, wherein the link performance data comprises at least one of a data rate, an error rate, a signal-to-interference ratio, and a signal-to-noise ratio and the transmission mode is selected from an upstream mode, a downstream mode, and a full-duplex mode; and

assign the desired transmission scheme to a connection between the two network elements in the discrete multi-tone communications system.

Applicant respectfully submits that claim independent claim 13 is patentably distinct from the cited art for at least the reason that the cited art does not disclose the features emphasized above. More specifically, the Office Action alleges in item 3 that *Barley* discloses a plurality of test transmissions that comprises an upstream transmission, a

Page 14

downstream transmission, and a full-duplex transmission. To support this allegation, the

Office Action cites the below quoted portions of Barlev in item 3:

The **test module** is also adapted to provide the appropriate line terminations if required by any of the measurements. *Barlev*, col. 18, lines 26-28. *Emphasis added.*

The process of loop qualification examines the loop configuration of the customer since a line with less attenuation is less affected by a given amount of crosstalk. The process also examines the type of equipment proposed to be installed and the existing systems already transmitting in the cable on the other pairs. This process is needed since different DSL schemes transmit downstream and upstream data differently. Some schemes segregate the frequencies used to transmit from the access service provider to the customer (i.e., downstream) from those used to transmit from the customer to the access device provider (i.e., upstream). *Barlev*, col. 4, lines 58-63

Alternatively, the same technique may be used for transmission of ADSL signals directionally over the same copper pair utilizing the more isolated pairs in the binder and utilizing well known full duplex echo cancellation techniques. *Barley*, col. 26, lines 9-13.

Applicants submit that the Office Action fails to disclose a plurality of test transmissions that comprises an upstream transmission, a downstream transmission, and a full-duplex transmission. A closer examination of the *Barlev* test module reveals that it has very little applicability to a system such as in the claimed invention. *Barlev* explicitly states the following regarding the test module:

The test module 210 is adapted to perform parameter measurements of the twisted pairs 208. The measurements include mapping the spatial structure of the cable (as shown in FIG. 4), including binders within the cable, using crosstalk measurements. The crosstalk measurements include measurements at low frequencies where crosstalk is more monotonously proportional to the distance between pairs, measurements of crosstalk between different pairs and of NEXT transmission functions over one or more frequencies of interest, measurements of attenuation, level of interference between different pairs, SNR and cable length.

Art Unit: 2419

Page 15

Barlev, col. 18, lines 5-15. The above cited portion of the reference clearly states that the measurements taken by the test module of the *Barlev* reference does *not* include an upstream transmission, a downstream transmission, and a full-duplex transmission. Rather, the *Barlev* test module performs parameter measurements that include mapping the spatial structure of the cable as well as binders within the cable using crosstalk measurements. The claimed invention performs neither. Accordingly, Applicants submit that *Barlev* actually *teaches away* from the claimed invention.

Additionally, the Office Action fails to cite any portion of the reference that discloses designating a transmission mode for each channel of the discrete multi-tone transmission scheme based on link performance data. The Office Action attempts to cite an element of the claims of *Barlev* (col. 47, lines 14-19), which states:

a plurality of modem elements coupled to said plurality of twisted copper pair lines, each modem element associated with one of said copper pair lines and configured to operate at a data rate, delay, signal to noise ratio, and bit error rate, and bit error rate independent of other modern elements.

Applicants respectfully submit that the above cited portion of the reference fails to include any mention of designating a transmission mode for each channel of a DMT scheme, much less based on link performance data. It merely states that a plurality of modem elements possess various properties such as a data rate, delay, signal to noise ratio, and bit error rate.

In addition, the Office Action cites col. 26, lines 21-24 to allege that the reference discloses performing such test transmissions at maximum power. In contrast, the reference instead discloses how to maximize power without violating PSD regulations

Art Unit: 2419

Page 16

limiting maximum power radiated from a binder. The cited portion of the reference does not have relevance to performing test transmissions.

Accordingly, Applicants respectfully submit that independent claim 13 is allowable for at least the reason that Barlev does not disclose, teach, or suggest at least the above emphasized claim elements. Therefore, Barlev does not anticipate independent claim 13, and the rejection should be withdrawn for at least that reason.

For at least the reason that independent claim 13 is allowable over the cited references of record, dependent claim 15 (which depends from independent claim 13) is allowable as a matter of law for at least the reason that dependent claim 15 contains all the features of independent claim 13. See Minnesota Mining and Manufacturing Co. v. Chemque, Inc., 303 F.3d 1294, 1299 (Fed. Cir. 2002) Jeneric/Pentron, Inc. v. Dillon Co., 205 F.3d 1377, 54 U.S.P.Q.2d 1086 (Fed. Cir. 2000); Wahpeton Canvas Co. v. Frontier Inc., 870 F.2d 1546, 10 U.S.P.Q.2d 1201 (Fed. Cir. 1989). Therefore, the rejection of claim 15 should be withdrawn and the claims allowed.

Claim 16 (with emphasis added) recites:

16. A system for dynamic bin allocation, the system comprising: means for obtaining link performance data based on a plurality of test transmissions between two network elements, wherein the plurality of test transmissions comprises an upstream transmission, a downstream transmission, and a full-duplex transmission, the plurality of test transmissions performed in every channel of a discrete multi-tone (DMT) communications system and each performed at a maximum transmission power;

means for determining a desired transmission scheme for the discrete multi-tone communications system, wherein each channel of the discrete multi-tone communications system is designated a transmission mode based on the link performance data, wherein the link performance data comprises at least one of a data rate, an error rate, a signal-to-interference ratio, and a signal-to-noise ratio and the transmission mode is selected from an upstream mode, a downstream mode, and a full-duplex mode; and

Page 17

means for assigning the desired transmission scheme to a connection between the two network elements in the discrete multi-tone communications system.

Applicant respectfully submits that claim independent claim 16 is patentably distinct from the cited art for at least the reason that the cited art does not disclose the features emphasized above. More specifically, the Office Action alleges in item 3 that *Barlev* discloses a plurality of test transmissions that comprises an upstream transmission, a downstream transmission, and a full-duplex transmission. To support this allegation, the Office Action cites the below quoted portions of *Barlev* in item 3:

The **test module** is also adapted to provide the appropriate line terminations if required by any of the measurements. *Barlev*, col. 18, lines 26-28. *Emphasis added.*

The process of loop qualification examines the loop configuration of the customer since a line with less attenuation is less affected by a given amount of crosstalk. The process also examines the type of equipment proposed to be installed and the existing systems already transmitting in the cable on the other pairs. This process is needed since different DSL schemes transmit downstream and upstream data differently. Some schemes segregate the frequencies used to transmit from the access service provider to the customer (i.e., downstream) from those used to transmit from the customer to the access device provider (i.e., upstream). *Barlev*, col. 4, lines 58-63

Alternatively, the same technique may be used for transmission of ADSL signals directionally over the same copper pair utilizing the more isolated pairs in the binder and utilizing well known full duplex echo cancellation techniques. *Barley*, col. 26, lines 9-13.

Applicants submit that the Office Action fails to disclose a plurality of test transmissions that comprises an upstream transmission, a downstream transmission, and a full-duplex transmission. A closer examination of the *Barlev* test module reveals that it has very little applicability to a system such as in the claimed invention. *Barlev* explicitly states the following regarding the test module:

Art Unit: 2419

Page 18

The test module 210 is adapted to perform parameter measurements of the twisted pairs 208. The measurements include mapping the spatial structure of the cable (as shown in FIG. 4), including binders within the cable, using crosstalk measurements. The crosstalk measurements include measurements at low frequencies where crosstalk is more monotonously proportional to the distance between pairs, measurements of crosstalk between different pairs and of NEXT transmission functions over one or more frequencies of interest, measurements of attenuation, level of interference between different pairs, SNR and cable length.

Barley, col. 18, lines 5-15. The above cited portion of the reference clearly states that the measurements taken by the test module of the Barlev reference does not include an upstream transmission, a downstream transmission, and a full-duplex transmission. Rather, the Barlev test module performs parameter measurements that include mapping the spatial structure of the cable as well as binders within the cable using crosstalk measurements. The claimed invention performs neither. Accordingly, Applicants submit that Barlev actually **teaches away** from the claimed invention.

Additionally, the Office Action fails to cite any portion of the reference that discloses designating a transmission mode for each channel of the discrete multi-tone transmission scheme based on link performance data. The Office Action attempts to cite an element of the claims of *Barlev* (col. 47, lines 14-19), which states:

a plurality of modem elements coupled to said plurality of twisted copper pair lines, each modem element associated with one of said copper pair lines and configured to operate at a data rate, delay, signal to noise ratio, and bit error rate, and bit error rate independent of other modern elements.

Applicants respectfully submit that the above cited portion of the reference fails to include any mention of designating a transmission mode for each channel of a DMT scheme, much less based on link performance data. It merely states that a plurality of

Art Unit: 2419

Page 19

modem elements possess various properties such as a data rate, delay, signal to noise ratio, and bit error rate.

In addition, the Office Action cites col. 26, lines 21-24 to allege that the reference discloses performing such test transmissions at maximum power. In contrast, the reference instead discloses how to maximize power without violating PSD regulations limiting maximum power radiated from a binder. The cited portion of the reference does not have relevance to performing test transmissions.

Accordingly, Applicants respectfully submit that independent claim 16 is allowable for at least the reason that *Barlev* does not disclose, teach, or suggest at least the above emphasized claim elements. Therefore, *Barlev* does not anticipate independent claim 16, and the rejection should be withdrawn for at least that reason.

For at least the reason that independent claim 16 is allowable over the cited references of record, dependent claim 18 (which depends from independent claim 16) is allowable as a matter of law for at least the reason that dependent claim 18 contains all the features of independent claim 16. See Minnesota Mining and Manufacturing Co. v. Chemque, Inc., 303 F.3d 1294, 1299 (Fed. Cir. 2002) Jeneric/Pentron, Inc. v. Dillon Co., 205 F.3d 1377, 54 U.S.P.Q.2d 1086 (Fed. Cir. 2000); Wahpeton Canvas Co. v. Frontier Inc., 870 F.2d 1546, 10 U.S.P.Q.2d 1201 (Fed. Cir. 1989). Therefore, the rejection of claim 18 should be withdrawn and the claims allowed.

Claim 19 recites (with emphasis added):

19. A computer readable medium having code for causing a processor to perform dynamic bin allocation, the computer readable medium comprising:

code adapted to obtain link performance data based on a plurality of test transmissions between the first network element and the second network element, *wherein the plurality of test transmissions*

Page 20

comprises an upstream transmission, a downstream transmission, and a full-duplex transmission, the plurality of test transmissions performed in every channel of a discrete multi-tone (DMT) communications system and each performed at a maximum transmission power;

code adapted to determine a desired transmission scheme for the discrete multi-tone communications system, wherein each channel of the discrete multi-tone communications system is designated a transmission mode based on the link performance data, wherein the link performance data comprises at least one of a data rate, an error rate, a signal-to-interference ratio, and a signal-to-noise ratio and the transmission mode is selected from an upstream mode, a downstream mode, and a full-duplex mode; and

code adapted to assign the desired transmission scheme to a connection between the two network elements in the discrete multi-tone communications system.

Applicant respectfully submits that claim independent claim 19 is patentably distinct from the cited art for at least the reason that the cited art does not disclose the features emphasized above. More specifically, the Office Action alleges in item 3 that *Barlev* discloses a plurality of test transmissions that comprises an upstream transmission, a downstream transmission, and a full-duplex transmission. To support this allegation, the Office Action cites the below quoted portions of *Barlev* in item 3:

The **test module** is also adapted to provide the appropriate line terminations if required by any of the measurements. *Barlev*, col. 18, lines 26-28. *Emphasis added.*

The process of loop qualification examines the loop configuration of the customer since a line with less attenuation is less affected by a given amount of crosstalk. The process also examines the type of equipment proposed to be installed and the existing systems already transmitting in the cable on the other pairs. This process is needed since different DSL schemes transmit downstream and upstream data differently. Some schemes segregate the frequencies used to transmit from the access service provider to the customer (i.e., downstream) from those used to transmit from the customer to the access device provider (i.e., upstream). *Barlev*, col. 4, lines 58-63

Alternatively, the same technique may be used for transmission of ADSL signals directionally over the same copper pair utilizing the more isolated

Page 21

pairs in the binder and utilizing well known full duplex echo cancellation techniques. Barlev, col. 26, lines 9-13.

Applicants submit that the Office Action fails to disclose a plurality of test transmissions that comprises an upstream transmission, a downstream transmission, and a full-duplex transmission. A closer examination of the Barlev test module reveals that it has very little applicability to a system such as in the claimed invention. Barlev explicitly states the following regarding the test module:

The test module 210 is adapted to perform parameter measurements of the twisted pairs 208. The measurements include mapping the spatial structure of the cable (as shown in FIG. 4), including binders within the cable, using crosstalk measurements. The crosstalk measurements include measurements at low frequencies where crosstalk is more monotonously proportional to the distance between pairs, measurements of crosstalk between different pairs and of NEXT transmission functions over one or more frequencies of interest, measurements of attenuation, level of interference between different pairs, SNR and cable length.

Barley, col. 18, lines 5-15. The above cited portion of the reference clearly states that the measurements taken by the test module of the Barlev reference does not include an upstream transmission, a downstream transmission, and a full-duplex transmission. Rather, the Barlev test module performs parameter measurements that include mapping the spatial structure of the cable as well as binders within the cable using crosstalk measurements. The claimed invention performs neither. Accordingly, Applicants submit that *Barlev* actually *teaches away* from the claimed invention.

Additionally, the Office Action fails to cite any portion of the reference that discloses designating a transmission mode for each channel of the discrete multi-tone transmission scheme based on link performance data. The Office Action attempts to cite an element of the claims of *Barlev* (col. 47, lines 14-19), which states:

Page 22

a plurality of modem elements coupled to said plurality of twisted copper pair lines, each modem element associated with one of said copper pair lines and configured to operate at a data rate, delay, signal to noise ratio, and bit error rate, and bit error rate independent of other modern elements.

Applicants respectfully submit that the above cited portion of the reference fails to include any mention of designating a transmission mode for each channel of a DMT scheme, much less based on link performance data. It merely states that a plurality of modem elements possess various properties such as a data rate, delay, signal to noise ratio, and bit error rate.

In addition, the Office Action cites col. 26, lines 21-24 to allege that the reference discloses performing such test transmissions at maximum power. In contrast, the reference instead discloses how to maximize power without violating PSD regulations limiting maximum power radiated from a binder. The cited portion of the reference does not have relevance to performing test transmissions.

Accordingly, Applicants respectfully submit that independent claim 16 is allowable for at least the reason that Barlev does not disclose, teach, or suggest at least the above emphasized claim elements. Therefore, Barley does not anticipate independent claim 16, and the rejection should be withdrawn for at least that reason.

For at least the reason that independent claim 19 is allowable over the cited references of record, dependent claim 21 (which depends from independent claim 19) is allowable as a matter of law for at least the reason that dependent claim 21 contains all the features of independent claim 19. See Minnesota Mining and Manufacturing Co. v. Chemque, Inc., 303 F.3d 1294, 1299 (Fed. Cir. 2002) Jeneric/Pentron, Inc. v. Dillon Co., 205 F.3d 1377, 54 U.S.P.Q.2d 1086 (Fed. Cir. 2000); Wahpeton Canvas Co. v.

Art Unit: 2419

Page 23

Frontier Inc., 870 F.2d 1546, 10 U.S.P.Q.2d 1201 (Fed. Cir. 1989). Therefore, the

rejection of claim 21 should be withdrawn and the claims allowed.

III. Rejections Under 35 U.S.C. §103(a)

A. Claim 8

The Office Action rejects claim 8 under 35 U.S.C. §103(a) as allegedly being unpatentable over referencea (U.S. Patent No. 7,133,441 to Barlev in view of U.S. Patent No. 6,263,048 to Nelson, et al. (hereinafter "Nelson").

For at least the reason that independent claim 1 is allowable over the cited references of record, dependent claim 8 (which depends from independent claim 1) is allowable as a matter of law for at least the reason that dependent claims 8 contains all the features of independent claim 1. See Minnesota Mining and Manufacturing Co. v. Chemque, Inc., 303 F.3d 1294, 1299 (Fed. Cir. 2002) Jeneric/Pentron, Inc. v. Dillon Co., 205 F.3d 1377, 54 U.S.P.Q.2d 1086 (Fed. Cir. 2000); Wahpeton Canvas Co. v. Frontier Inc., 870 F.2d 1546, 10 U.S.P.Q.2d 1201 (Fed. Cir. 1989). Therefore, the rejection of claim 8 should be withdrawn and the claims allowed.

Additionally, with regard to the rejection of claim 8, *Nelson* does not make up for the deficiencies of *Barlev* noted above.

VII. <u>Miscellaneous Issues</u>

Any other statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. In addition, any and all findings of inherency are traversed as not having been shown to be necessarily present. Furthermore, any and

Art Unit: 2419

Page 24

all findings of well-known art and official notice, or statements interpreted similarly, should not be considered well known for the particular and specific reasons that the claimed combinations are too complex to support such conclusions and because the Office Action does not include specific findings predicated on sound technical and scientific reasoning to support such conclusions.

Art Unit: 2419

Page 25

CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above,

Applicant respectfully submits that all objections and/or rejections have been traversed,

rendered moot, and/or accommodated, and that the now pending claims

pending claims are in condition for allowance. Favorable reconsideration and

allowance of the present application and all pending claims are hereby courteously

requested. If, in the opinion of the Examiner, a telephonic conference would expedite the

examination of this matter, the Examiner is invited to call the undersigned attorney at (770)

933-9500.

It is believed that no extensions of time or fees for net addition of claims are

required, beyond those which may otherwise be provided for in documents accompanying

this paper. However, in the event that additional extensions of time are necessary to allow

consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. §

1.136(a), and any fees required therefor (including fees for net addition of claims) are

hereby authorized to be charged to deposit account No. 50-0835.

Respectfully submitted,

/arr/

Arvind R. Reddy, Reg. No. 63,007

THOMAS, KAYDEN, HORSTEMEYER & RISLEY, L.L.P.

Suite 1500 600 Galleria Parkway Atlanta, Georgia 30339 (770) 933-9500

Customer No.: 38823